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Corrigendum

Corrigendum to "Centralizers of distinguished nilpotent pairs and related problems" [J. Algebra 252 (2002) 167–194]

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As indicated by A. Elashvili to the author, the statement of Theorem 6.8 on almost principal nilpotent pairs is not exact. In fact, this is because condition (i) of Proposition 4.5 is not exact. The correct statements of Proposition 4.5 and Theorem 6.8 should be as follows.

Proposition 4.5. *Let Γ be a centrally symmetric skew diagram. Then* $\operatorname{Card}\mathcal{E}(\Gamma,\Gamma) = 1 + \operatorname{Card}\mathcal{E}_+(\Gamma,\Gamma)$ *if and only if one of the following conditions is satisfied.*

(i) *Γ is semi-integral and near rectangular of type* (a) *or* (c) (*respectively of type* (b) *or* (c)) *if* $\Gamma \subset \mathbb{Z}^2 + (0,1/2)$ (*respectively* $\Gamma \subset \mathbb{Z}^2 + (1/2,0)$).
(ii) *Γ is integral and near rectangular of type* (a) *or* (b).

Theorem 6.8. *Let $\mathfrak{g}$ be of type C_n. Then there is a one-to-one correspondence between the set of conjugacy classes of almost principal nilpotent pairs and the set of pairs of centrally symmetric skew diagrams* (Γ^1,Γ^2) *satisfying*:

(a) $\operatorname{Card}\Gamma^1 + \operatorname{Card}\Gamma^2 = 2n$.
(b) $\Gamma^1 \subset \mathbb{Z}^2 + (0,1/2)$ *and* $\Gamma^2 \subset \mathbb{Z}^2 + (1/2,0)$.

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(c) *We have*
  (i) Γ^1 *is near rectangular of type* (a) *or* (c) *and* $\Gamma^2 = \emptyset$*, or*
  (ii) $\Gamma^1 = \emptyset$ *and* Γ^2 *is near rectangular of type* (b) *or* (c)*, or*
  (iii) Γ^1 *and* Γ^2 *are both rectangular with* $\Gamma^1 \subset \{0\} \times (\mathbb{Z} + 1/2)$ *and* $\Gamma^2 \subset (\mathbb{Z} + 1/2) \times \{0\}$.

The proof of Proposition 4.5 remains valid because when Γ is near rectangular and semi-integral, the only possibility for an element to be in $\mathcal{E}(\Gamma, \Gamma) \setminus \mathcal{E}_+(\Gamma, \Gamma)$ is the entire bottom row or the entire leftmost column. We can then check easily that the equality $\operatorname{Card} \mathcal{E}(\Gamma, \Gamma) = 1 + \operatorname{Card} \mathcal{E}_+(\Gamma, \Gamma)$ holds exactly when condition (i) is verified. Finally, Theorem 6.8 is a direct consequence of Proposition 4.5.